IN THE CLAIMS

1. (canceled)

2. (currently amended) A wireless transmission method for transmitting packets of asynchronous information to a wireless transmission apparatus of an information transmission destination from a wireless transmission apparatus of an information transmission source in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission method comprising the steps of:

in said wireless transmission apparatus of the information transmission source,

dividing asynchronous information to be transmitted from a high order layer into packets in sequence at a predetermined fragment size when the asynchronous information is received;

adding a sequence number to each of said packets and buffering the packets in a transmission buffer, the sequence number numbers added to said packets beginning with a number stored in a buffer pointer;

writing to said buffer pointer a sequence number corresponding to the most recently added sequence number; and

transmitting said packets to said wireless transmission apparatus of the information transmission destination under a predetermined access control~~The wireless transmission method according to Claim 1, further comprising the steps of:~~

~~writing the a recent sequence number buffered in said transmission buffer in a buffer pointer; and~~

~~adding a sequence number starting from a value of said buffer pointer when asynchronous information is next divided into packets~~.

3. (currently amended) A wireless transmission method for transmitting packets of asynchronous information to

a wireless transmission apparatus of an information transmission destination from a wireless transmission apparatus of an information transmission source in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission method comprising the steps of:

in said wireless transmission apparatus of the information transmission source,

dividing asynchronous information to be transmitted from a high order layer into packets in sequence at a predetermined fragment size when the asynchronous information is received;

adding a sequence number to each of said packets and buffering the packets in a transmission buffer, the sequence number numbers added to said packets beginning with a number stored in a buffer pointer;

writing to said buffer pointer a sequence number corresponding to the most recently added sequence number; and

transmitting said packets to said wireless transmission apparatus of the information transmission destination under a predetermined access control;

wherein upon further transmission packets are stored in said buffer up to a value indicated by a total sequence-number space for the packet for which acknowledgement information is received from said wireless transmission apparatus of the information transmission destination minus one ~~The wireless transmission method according to Claim 1, further comprising:~~

~~writing a most recent sequence number buffered in said transmission buffer in a buffer pointer; and~~

~~storing packets up to a value indicated by a total sequence-number space for the packet for which acknowledgement information is received from said wireless transmission apparatus of the information transmission destination minus~~

~~one, when asynchronous information is next divided into packets~~.

4. (canceled)

5. (canceled)

6. (currently amended) A wireless transmission method for transmitting packets of asynchronous information to a wireless transmission apparatus of an information transmission destination from a wireless transmission apparatus of an information transmission source in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission method comprising the steps of:

in said wireless transmission apparatus of the information transmission source,

providing a predetermined transmission window size; and

transmitting a packet when said packet is within said transmission window size even when reception of acknowledgement information from said wireless transmission apparatus of the information transmission destination is not confirmed,

said steps performing transmission control during transmission of the packets of asynchronous information;

~~The wireless transmission method according to Claim 5,~~

wherein said transmission control during the transmission of packets of asynchronous information is used for selection-repeat-resend-type automatic resend request control in which a packet of asynchronous information which is received from said wireless transmission apparatus of the information transmission destination is transmitted as acknowledgement to said wireless transmission apparatus of the information transmission source, and only a packet which has not been received is selected and retransmitted from said

wireless transmission apparatus of the information transmission source.

7. (previously presented) A wireless transmission method using selection-repeat-resend-type automatic resend request control in which a packet of asynchronous information which is received from said wireless transmission apparatus of the information transmission destination is transmitted as acknowledgement to said wireless transmission apparatus of the information transmission source, and only a packet which has not been received is selected and retransmitted from said wireless transmission apparatus of the information transmission source in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission apparatus comprising:

in said wireless transmission apparatus of the information transmission source,

providing a predetermined transmission window size;

using a low-order bit-map-space area which is two times as large as said transmission window size, and a high-order-bit identification pointer for indicating the position in the total sequence-number space to which said low-order bit-map-space area corresponds; and

virtually performing transmission control in the total sequence-number space by repeatedly reusing said low-order bit-map-space area and said high-order-bit identification pointer,

said steps performing transmission control during information transmission.

8. (previously presented) A wireless transmission apparatus for performing transmission of asynchronous information under the control of predetermined access control in a wireless network formed using a plurality

of transmission apparatuses which are communication stations, said wireless transmission apparatus comprising:

packetizing means for dividing asynchronous information into packets in predetermined information units on said wireless network;

buffering means for buffering said packets in a transmission buffer;

sequence number assigning means for assigning a sequence number for each of said packets;

storage means for storing the most recent sequence number buffered in said buffering means as a buffer pointer; and

sequence number adding means for reading the value of said buffer pointer and adding a sequence number when asynchronous information is next buffered.

9. (previously presented) A wireless transmission apparatus for transmitting information in a wireless network formed using a plurality of transmission apparatuses which are communication stations using selection-repeat-resend-type automatic resend request control in which information on a packet which is received by a wireless transmission apparatus of an information transmission destination is transmitted as acknowledgement to a wireless transmission apparatus of an information transmission source, and only a packet which has not been received is selected and retransmitted from said wireless transmission apparatus of the information transmission source, said wireless transmission apparatus comprising:

in said wireless transmission apparatus of the information transmission source,

window size setting means for providing a predetermined transmission window size;

low-order bit-map-space area setting means for setting an area which is two times as large as said window size; and

high-order-bit identification pointer setting means for indicating the position in the total sequence-number space to which said low-order bit-map-space area corresponds,

wherein transmission control in the bit-map spaces of the total sequence-number space is virtually performed by repeatedly reusing said low-order bit-map-space area and said high-order-bit identification pointer.

10. (New) The wireless transmission method as recited in claim 2, wherein said asynchronous information to be transmitted is received by said higher order layer via a high speed serial bus.

11. (New) The wireless transmission method as recited in claim 2, wherein said higher order layer is a high speed serial bus interface.